



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In re Application of:**

**Application No.:** 09/917,947      **Examiner:** Kang, Insun

**Filing Date:** July 31, 2001      **Art Unit:** 2193

**First Inventor:** Cuido Kersten      **Customer No.:** 23364

**Attorney No.:** KERS3001/JEK/JJC      **Confirm. No.:** 1529

**For:** **BANK NOTE PROCESSING MACHINE AND METHOD  
FOR OPERATING BANK NOTE PROCESSING  
MACHINE**

**SUPPLEMENTAL APPEAL BRIEF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INTRODUCTORY COMMENTS**

This is an appeal brief filed pursuant to the applicants' appeal to the Board of Patent Appeals and Interferences from the rejection of claims 1, 2 and 4-7 in the above-identified application.

**I. REAL PARTY OF INTEREST**

The real party of interest is the assignee of record: Giesecke & Devrient, GmbH (Munich, GERMANY).

**II. RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**III. STATUS OF CLAIMS**

**A. Status of Claims in Proceeding**

Claims 1, 2 and 4-7 are currently pending in the pending application. Claims 3 and 8-14 are canceled.

**B. Identification of Appealed Claims**

Claims 2 and 4-7 depend from claim 1, and their patentability is based on their dependency from claim 1 and their individually recited features.

A copy of all of the pending claims as presented in the last entered amendment dated June 22, 2005 is included in the attached Appendix I.

**IV. STATUS OF AMENDMENTS**

There are no pending amendments of the claims. The last amendment was filed on June 22, 2005 of which entry was acknowledged in the Office action dated August 11, 2005.

Claims 1, 2 and 4-7 are pending.

Claims 3 and 8-14 are canceled.

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

For the purposes of appeal, only the rejection of independent claim 1 is appealed. The remaining pending claims depend from claim 1.

Claim 1 recites a bank note processing machine. The bank note processing machine includes sensors (5), a transport system (6) and an input/output device (7) (Fig. 1; page 3, lines 12-17).

The bank note processing machine also includes a control device (3) that has an associated memory (4, 4a) (Fig. 1; page 3, lines 18-29). The control device (3) controls the elements of the bank note processing machine by means of software and/or data stored in the memory (4, 4a).

The bank note processing machine further has an interface (1) (Fig. 1; page 4, lines 5-14). The interface makes it possible to couple memory systems (2) of different types to the bank note processing machine in order to alter, supplement or replace the software and data in the memory (4a, 4). The memory system (2) has a drive (2b) and a storage medium (2a) which are suitable for optical and magnetic recording (Fig. 2; page 5, lines 1-12).

The transport system (6) of the bank note processing machine includes a singling unit and at least one stacking unit (only generic transport system is shown in drawings; page 3, line 30 through page 4, line 2). The transport system is arranged to transport single bank notes singled by the singling unit along the sensors (5) to the at least one stacking unit according to an evaluation of data obtained by the sensors (5) by the control device (3) (page 4, lines 1 and 2).

**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1, 2 and 4-7 stand rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. patent 5,909,502 (*Mazur*).

**VII. ARGUMENT**

As discussed in detail below, the basis for the rejection of claims 1, 2 and 4-7 does not amount to a case of anticipation for the combination of subject matter recited in the rejected claims. Therefore reversal of the rejection of claims 1, 2 and 4-7 is respectfully requested.

**A. Information Disclosure Statement (IDS)**

The rejection indicates that no English explanation of relevance and no written English translation of the foreign references listed in the IDS filed on November 20, 2001 were provided. In response, the applicant respectfully submits that the foreign reference DE 195 34 528 A1 corresponds and relates to U.S. patent no. 5,734,571 (*Pilz et al.*). It is further submitted that foreign reference DE 43 12 894 A1 corresponds and relates to U.S. patent nos. 5,699,258 (*Thiel*), 5,602,743 (*Freytag*), and 5,490,077 (*Freytag*).

With regards to *Fokes* publication, it is submitted that the publication describes a microcontroller, wherein software updates can be made via a serial interface. There is no relation to the processing of banknotes mentioned in the publication.

With respect to the *Rankl et al.* publication, it is submitted that the publication generally describes the function and structure of chipcards. In the portions of the publication submitted to the U.S. Patent and Trademark Office, the publication describes that chipcards can be updated with program code. It is not apparent how this discussion of chipcards may be related to the processing of banknotes.

Accordingly, it is respectfully submitted that the requirements of the IDS submitted on November 20, 2001 are fully met.

**B. Claim Rejections**

Claims 1, 2 and 4-7 in this application were rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. patent 5,909,502 (*Mazur*) in the Office action dated November 17, 2006.

**C. Pertinent Law**

As set forth in the MPEP, “to anticipate a claim, the reference must teach every element of the claim.” (MPEP § 2131). “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

**D. The *Mazur* patent does not amount to a case of anticipation of claim 1**

Reversal of the rejection of claim 1 is respectfully requested on the basis that the *Mazur* patent fails to disclose or suggest every limitation of the bank note processing machine according to claim 1. Accordingly, claim 1 is patentable in view of the teachings of the *Mazur* patent since the reference does not constitute a case of anticipation.

The *Mazur* patent fails to constitute a case of anticipation of the bank note processing machine according to claim 1 on the basis of the following shortcomings.

(1) The *Mazur* patent does not disclose or suggest an interface which makes it possible to couple memory systems of different kinds to the bank note processing machine;

(2) the *Mazur* patent does not disclose or suggest a memory system having a drive and a storage medium which are suitable for optical and/or magnetic recording; and

(2) the bank note processing machine according to the *Mazur* patent is unsuited for including a computer system that has a drive and a storage medium suitable for optical and/or magnetic recording.

First, the *Mazur* patent is directed to a currency discrimination machine that utilizes known parameters or patterns of banknotes in order to recognize and sort different currencies or denominations of the same currency (col. 3, line 61 through col. 4, line 4). The resident memory of the currency discrimination machine may be upgraded when the parameters or patterns of the currencies change, (col. 4, lines 4-12).

In order to accomplish this updating, a removable flash card 40 is provided having the updated parameter or pattern information, or other software upgrades and updates (col. 7, lines 55-62). While the *Mazur* patent recognizes that memories such as electrically erasable programmable read only memories (EEPROMs) or one-time programmable read-only memories may be used in place of the flash memory disclosed, there is no disclosure that the different memory types disclosed may be utilized with an interface which allows different memory systems to be coupled to the currency discrimination machine.

In fact, the only two embodiments disclosed that describe or illustrate the interface clearly show an interface that is configured to accept a particular size and type of memory, instead of an interface that allows different memory systems to be coupled to the currency discrimination machine, as required by pending claim 1.

Specifically, Figs. 4 and 5 each disclose a particularly defined slot 38 and socket 42 for receiving a single size and type of flash memory. Given the nature of the construction of the disclosed flash memory, a specifically defined socket that is specifically configured to physically receive the particular flash memory is required. If an improperly sized socket, or a mismatched socket and flash memory are utilized, the interface will simply not function.

Thus, the *Mazur* patent discloses uniquely sized and shaped sockets for receiving a correspondingly sized and shaped flash memory. There is no disclosure

or suggestion in the *Mazur* patent to provide an alternate interface that would allow different types of memory systems to be coupled to the currency discrimination machine, as is required by pending claim 1.

Accordingly, the *Mazur* patent fails to disclose or suggest every limitation of pending claim 1, and therefore cannot form a proper case of anticipation. For at least this reason, withdrawal of this rejection is respectfully requested.

Second, the *Mazur* patent does not disclose or suggest a bank note processing machine wherein the memory system has a drive and a storage medium which are suitable for optical and/or magnetic recording, as required by pending claim 1. Instead, it is explained by the *Mazur* patent that it is highly preferred to employ a flash memory to update software employed by the system controller since the flash memory enables the memory to be erased and reprogrammed within fractions of a second, the flash memory is less expensive than EEPROMs, and that it offers a high degree of versatility for a relatively low cost memory structure (col. 6, lines 4-20; col. 8, lines 1-2).

The rejection appears to suggest that the flash card 40 is a drive and a storage medium which are suitable for optical and/or magnetic recording, since the flash card has information stored on it that relates to the magnetic or optical characteristics of the currency denominations to be evaluated (col. 7, lines 55-59). However, simply storing information related magnetic or optical characteristics of currency denominations is not the same as providing a drive and a storage medium which are suitable for optical and/or magnetic recording.

On the contrary, flash cards utilize a solid state configuration to store information as opposed to a drive and a storage medium which are suitable for optical and/or magnetic recording. Therefore, the *Mazur* patent fails to disclose or suggest every limitation of pending claim 1, and withdrawal of this rejection is respectfully requested.

Third, there is no disclosure or suggestion in the *Mazur* patent that would tend to motivate a skilled artisan to provide a bank note processing machine with a

drive and a storage medium which are suitable for optical and/or magnetic recording. On the contrary, the *Mazur* patent envisions a very limited memory system that provides inexpensive memory replacement within fractions of a second, and no input via keystrokes or other data entry by an operator (col. 6, lines 4-20; col. 8, lines 40-55).

According to the *Mazur* patent, it is undesirable to provide a memory system that does not provide quick and easy installation of software to be executed by the system controller (col. 6, lines 34-37). The *Mazur* patent notes that installation of the software should not involve removing memory and replacing resident memory chips, and should be performed without entering several keystrokes (col. 2, lines 5-11).

In view of its teachings, the memory system of the *Mazur* patent is relatively inflexible with respect to the storage medium available for updating since it is very limited to the type of permissible storage medium. In the alternative, the memory system recited in pending claim 1 permits an operator to select from a plurality of memory systems and may include criteria for selecting memory by memory volume, size, robustness and price (specification, page 2, lines 20-22).

Therefore, as discussed in detail above, The *Mazur* patent fails to constitute a case of anticipation of the bank note processing machine according to claim 1 on the basis of the following shortcomings.

(1) The *Mazur* patent does not disclose or suggest an interface which makes it possible to couple memory systems of different kinds to the bank note processing machine;

(2) the *Mazur* patent does not disclose or suggest a memory system having a drive and a storage medium which are suitable for optical and/or magnetic recording; and

(2) the bank note processing machine according to the *Mazur* patent is unsuited for including a computer system that has a drive and a storage medium suitable for optical and/or magnetic recording.

Application No.: 09/917,947  
Supplemental Brief on Appeal

Accordingly, the *Mazur* patent cannot provide a case of anticipation of claim 1, and withdrawal of this rejection is respectfully requested.

**VIII. Conclusion**

For the reasons set forth above, independent claim 1 of the pending application defines subject matter that is not anticipated within the meaning of 35 U.S.C. § 102(b) by the *Mazur* patent.

Reversal of the rejection of claim 1 is respectfully requested. Since the remaining claims 2 and 4-7 depend from claim 1, the reversal of the rejection of these claims is likewise respectfully requested.

The Office is authorized to charge any additional fees associated with this communication Deposit Account No. 02-0200.

BACON & THOMAS, PLLC  
625 Slaters Lane, Fourth Floor  
Alexandria, Virginia 22314-1176  
Phone: (703) 683-0500

Respectfully submitted,  
/Justin J. Cassell, Reg. No. 46,205/

Date: February 20, 2007

JUSTIN J. CASSELL  
Attorney for Applicant  
Registration No. 46,205

**IX. CLAIMS APPENDIX**

1. A bank note processing machine comprising:
  - sensors, a transport system including a singling unit and at least one stacking unit, an input/output device, and
    - a control device with an associated memory which controls the elements of the bank note processing machine by means of software and/or data stored in the memory and
      - an interface which makes it possible to couple memory systems of different kinds to the bank note processing machine in order to alter, supplement or replace the software and/or data stored in the memory;
      - wherein the memory system has a drive and a storage medium which are suitable for optical and/or magnetic recording
      - wherein the transport system transports single bank notes singled by the singling unit along the sensors to the at least one stacking unit according to an evaluation of data obtained by the sensors by the control device.

2. The bank note processing machine according to claim 1, wherein that the interface is a standardized interface, in particular according to PCMCIA.

Claim 3 (Cancelled)

4. The bank note processing machine according to claim 1, wherein the memory has a nonvolatile area, and after coupling of the memory system to the

interface the software and/or data stored in the memory system are stored in the nonvolatile area.

5. The bank note processing machine according claim 1, wherein that the memory has a volatile area, and after coupling of the memory system to the interface the software and/or data stored in the memory system are stored in the volatile area.

6. The bank note processing machine according to claim 1, wherein data obtained in the bank note processing machine during operation are stored in the memory system.

7. The bank note processing machine according to claim 1, wherein the software and/or data stored in the memory system are stored in encoded form, and the controller is set up to decode the encoded software and/or data.

Claims 8 - 14 (Cancelled)

**X. EVIDENCE APPENDIX**

There are no copies of evidence entered and relied upon in this appeal  
of the pending application.

**XI. RELATED PROCEEDINGS APPENDIX**

There are no related proceedings or decisions rendered by a court or the Board of Appeals in any proceeding identified in the related appeals and interferences section in the pending application.